

REMARKS

The independent claims have been amended to require either an isolated polypeptide s encoded by the polynucleotide sequence *consisting of* SEQ ID NO:1 or an isolated polypeptide *consisting of* the amino acid sequence of SEQ ID NO:2 (*emphasis added*). In view of these amendments, Applicants believe that all of the Examiner's rejections have been overcome.

Upon entry of the amendments made herein, claims 18, 20-26 and 39-46 are pending in the application. Claims 1-17 and 27-38 have been cancelled herein for being drawn to non-elected inventions. Claims 19 has also been cancelled herein. Cancellation of claims is made without prejudice or disclaimer. Claims 18 and 20-26 have been amended herein. Support for the amendments can be found at page 4, line 10 through page 5, line 5. No new matter has been added.

Claim Objections

The Examiner has objected to claim 18 for being depending upon a non-elected claim. Applicants have amended claim 18 to be in independent format. As such, this objection is moot and should be withdrawn.

Claim Rejections

Rejection under 35 U.S.C. §101

The Examiner has rejected claims 18-23 under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Specifically the Examiner indicated that the protein claimed is a product of nature, which is not patentable. Applicants have amended claim 18, from which the remaining claims properly depend, to recite an isolated polypeptide. Applicants believe this rejection has been overcome and should be withdrawn.

Rejections under 35 U.S.C. §112, Second Paragraph

The Examiner has rejected claims 18-26 under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants traverse this rejection with respect to the claims as amended herein.

The Examiner indicated that claim 18 is indefinite because the metes and bounds of "fragments thereof," "variant," and "hybridizing under stringent conditions" cannot be

determined. Claim 19 has been cancelled. The scope of amended claim 18, when written in independent form, no longer encompasses the terms “fragments” or “variants.”

The Examiner also indicated that claim 19 is indefinite. This rejection is moot in view of the cancellation of claim 19.

Further, the Examiner indicated that claims 20 and 21 were indefinite for “a” nucleotide sequence and “an” amino acid sequence. As suggested by the Examiner, Applicants have amended claims 20 and 21 to recite “the” nucleotide sequence and “the” amino acid sequence.

Applicants submit that this rejection as been overcome and should be withdrawn.

Rejections under 35 U.S.C. §112, First Paragraph

Written Description

The Examiner has rejected claims 18-26 under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement. Specifically, the Examiner indicated that the claims directed to a genus of proteins having at least 70% identity with a protein of SEQ ID NO:2, or encoded by a nucleic acid that hybridizes under “stringent conditions” to that of SEQ ID NO:1, or which has unlimited substitutions or alterations as compared to SEQ ID NO:2, and the functional limitation where the peptide has an activity of vascular endothelial cell growth activity, activity in promoting transcription from c-fos promoter, activity in promoting transcription from VEGF promoter, or angiogenesis activity are not adequate to fulfill the written description requirements. Applicants traverse this rejection with respect to the claims as amended herein.

Applicants have amended claim 18 to recite that the claimed polypeptide is encoded by the sequence *consisting of* SEQ ID NO:1 (*emphasis added*). Additionally, new claim 39 requires a polypeptide *consisting of* the amino acid sequence of SEQ ID NO:2 (*emphasis added*). As such, Applicants submit that the claims no longer recite a genus, but rather specific sequences.

Applicants submit that this rejection as been overcome and should be withdrawn.

Enablement

The Examiner has rejected claims 18-26 under 35 U.S.C. §112, first paragraph, for lack of enablement. Specifically, the Examiner indicated that while the specification is enabling for a

peptide having the SEQ ID NO:2 being encoded by a polypeptide of SEQ ID NO:1, or a fragment thereof that retains one or more of the activities recited in claim 19, the specification does not provide enablement for a protein having at least 70% identity with a protein of SEQ ID NO:2, or unspecified mutants of it. Applicants traverse this rejection with respect to the claims as amended herein.

Applicants have amended claim 18 to recite that the claimed polypeptide is encoded by the sequence *consisting of* SEQ ID NO:1 (*emphasis added*). New claim 39 requires a polypeptide *consisting of* the amino acid sequence of SEQ ID NO:2 (*emphasis added*). Both of which are acknowledged by the Examiner as being enabled.

Applicants submit that this rejection as been overcome and should be withdrawn.

Rejections under 35 U.S.C. §102(b)

Claims 18-26 are rejected under 35 U.S.C. §102(b) as being anticipated by US Publication No. 2002/0137081 ("Bandman"). The Examiner indicated that Bandman teaches a plurality of cDNAs or their complements, SEQ ID NOs:1-850, which may be used on a substrate to diagnose, to stage, to treat or to monitor the progression or treatment of a vascular disorder. Specifically, the Examiner asserts that present invention is anticipated, as part of SEQ ID NO: 637 (*see* Exhibit A), which described in Bandman is identical to SEQ ID NO: 1. Applicants traverse this rejection with respect to the claims as amended herein.

In order to anticipate a claim, a reference must teach each and every element of the claim. (*See*, MPEP §2131). Applicants have amended claim 18 to recite that the claimed polypeptide is encoded by the sequence *consisting of* SEQ ID NO:1 (*emphasis added*). Additionally, new claim 39 requires a polypeptide *consisting of* the amino acid sequence of SEQ ID NO:2 (*emphasis added*).

Bandman discloses a nucleic acid sequence comprising 4,121 nucleic acids. Moreover, Bandman indicated that the nucleic acids at positions 697, 702 and 715 are not specifically identified and that they can be *any* nucleic acid or even comprise another option (*emphasis added*). (*See*, Exhibit A). Further, there are 3 possible reading frames for the cited sequence disclosed in Bandman as shown in Exhibit B, Exhibit C and Exhibit D, which are enclosed. As shown in the translation of frame 1 and frame 3, many stop codons appear. A skilled artisan

looking at the number of stop codons in frames 1 and 3 would understand that there is no open reading frame encoding the protein in either of these frames. Frame 2 of the translation of SEQ ID NO:637 is the only frame with an open reading frame.

The premise of the invention disclosed by Bandman is that a protein is expressed from cDNA. Thus those skilled in the art who read Bandman will only use frame 2, which has an open reading frame, in contrast to frames 1 or 3, which do not have an open reading frame. In view of Bandman no utility is understood from frames 1 and 3.

While Applicants submit that SEQ ID NO:1 is contained within SEQ ID NO:637 of Bandman, the claimed sequence consists of merely 93 nucleic acids of the 4,121 nucleic acids of SEQ ID NO:637. Further, when translated, the claimed polypeptide sequence appears only in frame 3 (*see Exhibit D*), which, as articulated above, has many stop codons and also does not have an open reading frame. There is no teaching in Bandman to extract the nucleotide sequence required by claims or to use the polypeptide encoded by the nucleotide sequence *consisting of* SEQ ID NO:1 (*emphasis added*). Therefore, Bandman does not anticipate the claims as amended herein.

Applicants request reconsideration and withdrawal of the rejection.

CONCLUSION

On the basis of the foregoing amendment and remarks, Applicants respectfully submit that the pending claims are in condition for allowance and a Notice of Allowance for the pending claims is respectfully requested. If there are any questions regarding this application that can be handled in a phone conference with Applicants' Attorneys, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,



Date: February 13, 2009

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